



Project Brief
2017–2020

Climate-smart dairy systems in East Africa

Improved forages and feeding strategies to increase productivity, nutrition, and adaptive capacity of smallholder livestock systems

Making the case

Meat and milk are a critical component of a balanced diet in East Africa and are vital to nutrition security, particularly for children. As a result of population growth and changing diets, the demand for meat and milk is rising quickly, presenting new opportunities for livestock producers. Mixed crop–livestock systems produce 70% of the meat and 90% of the milk in the region, while also providing livelihoods for some 50 million of Africa's rural poor. But currently, livestock systems of the East African highlands suffer from low productivity, are at risk from extreme weather, and are also hotspots for greenhouse gas (GHG) emissions.

By numbers

- 50** million rural poor are involved in livestock production across Africa
- 2/3** of agricultural GHG emissions come from smallholder livestock systems
- Up to 40%** more milk and tens of millions of dollars in revenue possible for East African dairy farmers adopting a new drought-resistant pasture grass, which can also reduce GHG emissions and sequester CO₂
- 4** countries targeted: Tanzania and Rwanda, with learning exchanges with Kenya and Burundi
- 7** IFAD programs are linked to the project, which will be scaled-up through the involvement of national extension systems

Innovation for impact

The project goal is to design climate-smart dairy production through improved forages and feeding strategies that increase the incomes and resilience of smallholder farmers:

Assess

Map livestock systems, simulate feed production, increase livestock density, and increase efficiency.

Characterize

Classify households and feeding systems to develop climate-smart options.

Design

Model climate-smart options and validate with farmer groups for suitability and ease of adoption.

Evaluate

Validate best-bet forage and management options in farmers' fields.

Scale

Apply results through IFAD programs and other development partners. Strengthen capacity of regional agricultural programs through learning exchanges between Rwanda-Burundi and Tanzania-Kenya.

Bottom line

Small-scale dairy producers, especially women, youth and marginalized groups, and actors along the dairy value chain, will increase productivity and resilience, while reducing negative impacts of their livestock systems.



Lushoto, Tanzania (photos: Georgina Smith/CIAT)

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